



The Raleigh Amateur Radio Society's **EXCITER**

GET INVOLVED

- RARS General Membership meeting: Second Tuesday of the month.
- The RARS net meets every night except Saturday @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays @ 8:00 PM on 146.64.
- RARS meets for a monthly dinner on the First Tuesday of each month.



PUBLIC SERVICE EVENTS

Interested in helping? Visit
<http://www.rars.org/public-service.php>

frequently for our 2018
ham public service
schedule.

RARS General Meeting

Topic: Emergency Communications and Amateur

Radio by Karl Bowman, W4CHX

Date: February 13, 2018

Time: Meeting at 7:30PM

Informal gathering and refreshments from 7 - 7:30 p.m.

Where: Ridge Road Baptist Church. 2011 Ridge Rd., Raleigh

New HAM / Elmer meeting, 6:00 p.m. before member meeting

Tadd Torborg, KA2DEW, Elmer Coordinator

[Click here for more information.](#)

President's Message

February is a great month for Amateur Radio in Raleigh. For many RARS members February starts with a drive up to Richmond, VA for Frost Fest (the largest winter ham fest in the mid-Atlantic). Frost Fest is also the ARRL state convention for Virginia and while technically only a one-day ham fest, there is a nice reception and time for eye-ball QSOs the night before.

The first Tuesday of every month is the RARS supper, which is always a great time of fellowship for RARS members, friends and family. The second Tuesday of the month is our RARS meeting and this month's

[Continued on page 4](#)

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The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18 per year (from July 1 through June 30). Additional immediate family members pay \$5 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year. Applications for membership may be obtained from the treasurer or on the RARS website (www.rars.org).

Exciter

The Exciter is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The Exciter welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the third Friday of the preceding month. All submissions must be final. Drafts are not accepted.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Tom Lewis, N4TL, editor (editor@rars.org)

For Your Information

RARS General Meeting

Date: Second Tuesday of each month

Location: Ridge Road Baptist Church 2011
Ridge Road Raleigh, NC, 27607

Time: People begin arriving at 7 p.m. The meeting officially begins at 7:30 p.m.

RARS Monthly Dinner

All members and guests are welcome to the monthly (first Tuesday) RARS Supper, 6:30PM, at the Golden Corral Restaurant, 6129 Glenwood Ave., Raleigh. Informal and Dutch, just bring your appetite and best rag to chew. 73, Chuck, K4HF

RARS Repeaters in Raleigh

146.640 and 444.525

Join us for the nightly RARS net at 8 p.m. on the 146.640 repeater. All hams holding a Technician class license or higher are invited to check in. We welcome both RARS and non-RARS members to the net.

There is a net Listing on the RARS website click here. <http://www.rars.org/nets.php>

VE Testing

The RARS VEs will accept walk-in testing in February, May, August and November at 5:30PM, prior to RARS membership meetings at Ridge Road Baptist Church; the RARSfest in April; the Cary Swapfest in July; the JARS-Fest in November; and following RARS license classes. Please bring a photo ID, your original and a copy of your current license, your \$14 exam fee, and any valid CSCEs that prove passing elements beyond that of your current license. Visit www.rars.org for more information.

January 2018 RARS Net Report Summary

Checkins: 521

Traffic Brought/Passed: 9/9

Minutes: 997

Sessions: 31

Virginia Enzor NC4VA

RARS Net Manager

Future Hamfests

A full list of Hamfests can be found at the [ARRL website](#).

03/09/2018 | [North Carolina Section Convention \(Charlotte Hamfest\)](#)

Location: Concord, NC

Type: ARRL Convention

Sponsor: Mecklenburg Amateur
Radio Society

Website: <http://charlottehamfest.org>

03/31/2018 | [North Carolina State Convention \(Raleigh Hamfest\)](#)

Location: Raleigh, NC

Type: ARRL Convention

Sponsor: Raleigh Amateur Radio Society

Website: <http://rarsfest.org>

President's Message continued

presentation will be on the very timely topic of "Emergency Communications and Amateur Radio" by Karl Bowman, W4CHX. As always, a new hams meeting will take place just before the regular meeting to help our newly licensed members get off to a good start.

Then just a couple of short weeks later we end the month with the North Carolina QSO Party. The first running of the NC QSO Party was sponsored by RARS in 1970 and the event is still one of our most fun operations of the year. Now it is part of the "Carolina Weekend" with the South Carolina QSO Party being on Saturday, 24 February and the North Carolina QSO Party being on Sunday, 25 February. Full details about the event can be found at www.ncqsoparty.org. This great event does not happen by itself. An entire team of volunteers works very hard to put this event together for the enjoyment of hams around the world. We sincerely appreciate: Marty Young, W4MY, NCQP Committee Chairman, Joanne Mars, AA3N, Clubs Manager, Andy Peterson, AA9P, "IT Guy", Bill Turner, W4WNT, Member at Large / West, Marc Sullivan, W4MPS, Log Analyst, Charles Swindell, WB4DCM, At-Large Member, East, Dwayne Ayers, N4MIO, Awards Manager. These folks make the NCQP succeed and their work is much appreciated.

Many RARS members will be traveling to distant "rare" parts of the state to operate portable. Others will be operating from home and will enjoy being on the receiving end of a pile up from their own station.

But perhaps the most fun will be had at the home of RARS Members Joe (WA4GIR) and Liz (KO4CK) White who are once again inviting folks to come to their home and operate the NCQP from their station in a friendly, relaxed, setting full of good ham radio operator fellowship. If you are a new operator and just want to see what all the excitement is about, or maybe you don't have a home station, or you want to show your spouse, son or daughter how the contest works, or you just like to fellowship with hams and enjoy the opportunity to be together, please come on out to the White's house and be part of that operation. Operators of all skill levels and experiences are welcome. RARS sincerely thanks Joe and Liz for their hospitality! Joe and Liz will have their home open from 10 AM to 8 PM (the hours of the

President's Message continued

contest) on Sunday, 25 February and their address is 863 NEODAK ROAD APEX, NC 27523.

We have our next Ham Radio Licensing class coming up in March. There is full information about that later in this newsletter. Please share this information with the people you know who might be interested. Thanks go to Curt, W4CP who will be the instructor. You can download a printable flier about the class from www.rars.org and put it up on a bulletin board at your church, library, grocery store or any place where fliers can be posted. Also, if you check into area 2-meter nets please announce the classes on the net if you don't hear anyone else do it first. Help share this opportunity to join our great hobby with others. As of 31 January we already have 7 out of our 20 seats filled. Our students include young people and adults.

Finally, I encourage everyone to keep monitoring the 146.64 repeater and answer any calls you hear. Help make our flagship repeater a place of welcome to new and old hams alike. I am very impressed with the good operating practices I hear from the users of our machines and really enjoy the conversations that I am either part of or listen to throughout the day. Of course, remember there is a net every night at 8 PM on the 146.64, so please don't be shy!

73, Carl W8WZ

Kosovo New DXCC Entity

The Republic of Kosovo (Z6) has been added to the DXCC List of current entities, increasing the total number of current DXCC entities to 340. The addition of Kosovo raises to 331 the required number of current entities confirmed to qualify for DXCC Honor Roll; Top of Honor Roll is 340. DXCC award accounts are being tabulated to reflect the change. This change qualifies as an "event," effective on January 21, 2018, at 0000 UTC. Nothing is retroactive. There is more information at the ARRL website. <http://www.arrl.org/news/amendment-to-arrl-dxcc-rules-will-expand-dxcc-list>

73 Tom N4TL

RARS February Birthdays

| | | |
|----------|--------|-------|
| Greg | KN4DRP | 02/02 |
| Jonathan | KN4EVA | 02/02 |
| Sue | W2GHK | 02/02 |
| Selene | KG4RMT | 02/03 |
| LOS | AF0AA | 02/03 |
| Artie | KC2JFU | 02/05 |
| Grady | KJ4RZU | 02/05 |
| Chris | KM4RJQ | 02/06 |
| Larry | N4LEW | 02/07 |
| Kevin | KN4CDH | 02/07 |
| Bill | KN4IX | 02/08 |
| Tom | N4TL | 02/13 |
| Dennis | WZ0Q | 02/13 |
| Tony | K1OC | 02/14 |
| Dave | KK4ELT | 02/16 |
| Jim | W2PAU | 02/16 |
| Dick | WW4NC | 02/16 |
| Rick | W4BFG | 02/18 |
| Howard | N4KYW | 02/19 |
| Jim | WH6JQ | 02/20 |
| Roger | K4KDX | 02/20 |
| Israel | N4ZVU | 02/21 |
| Joe | N1LVN | 02/21 |
| Steve | KE4COB | 02/22 |
| Edmund | KM4TCB | 02/22 |
| Charlie | WA3UTC | 02/24 |
| Joe | W4TTO | 02/25 |
| John | W1JVN | 02/25 |
| Carl | W8WZ | 02/26 |

RARS February Birthdays

| | | |
|----------|--------|-------|
| Bob | WX4MMM | 02/26 |
| Kathleen | KM4CSF | 02/28 |
| Greg | K4IPO | 02/28 |
| Mary | KG4OQA | 02/28 |
| Greg | KN4BEH | 02/28 |

New RARS Members

| | |
|------------------|--------|
| Dave Edmonds | K4DME |
| Chance Paruchuri | KN4IOS |
| Artie Zapke III | KC2JFU |

RARS has a new website URL just for the RARSfest

<http://rarsfest.org>

Thanks to K4HM - Hank

RARS also is on Facebook and Twitter.

<https://www.facebook.com/Raleigh-Amateur-Radio-Society-273341139963/>

<https://twitter.com/hashtag/rarsfest>

<https://twitter.com/search?vertical=default&q=rarsfest&src=typd>

*New HAM / Elmer meeting, 6:00 p.m. before the
member meeting*

Tadd Torborg, KA2DEW, Elmer Coordinator

*The New Hams meeting is held every month before the regular RARS meeting.
We'll try to start by 6pm. We try to address topics in a manner that will be of help
to hams in their first year of operation.*



There were seventeen people at the January new hams meeting. Tadd, KA2DEW is showing a home brew two meter Yagi antenna. Others are working on making antennas.

A cup for the outgoing president



Current RARS president Carl Davis, W8WZ thanked past president Dennis Keith, NC4DK for his leadership for the last two years. Carl presented Dennis with a cup that has “Past President Raleigh Amateur Radio Society” on it.

January Door Prize winners



Mark Kilmer, KM4JRH and Tara Goodwin, W4TSW

January presentation

RFI tracking and location By Dave Wood, W4EJ



Dave Wood, W4EJ talking about how to find RFI noise generators. He also covered suppression methods. The black box on the table is a spectrum analyzer. He used it to show how much noise is generated by a number of different light bulbs. Incandescent bulbs don't generate any noise. CFLs generate a lot. He showed that some LEDs are noisy. He showed a Duracell LED bulb that did not generate any noise.

Capacitors used in AC line filter have to be AC rated safety caps, see www.justradios.com/safetytips.html

Read about RF Interference at this website www.audiosystemsgroup.com/K9YC/K9YC-old.htm

The RADCOM magazine published by the Radio Society of Great Britain has good information on RFI, <http://rsgb.org/main/publications-archives/radcom/>

Another interesting website <http://www.fair-rite.com/>

January presentation continued

Here are a few items that Dave showed during his presentation.



Low Noise Duracell LED bulbs

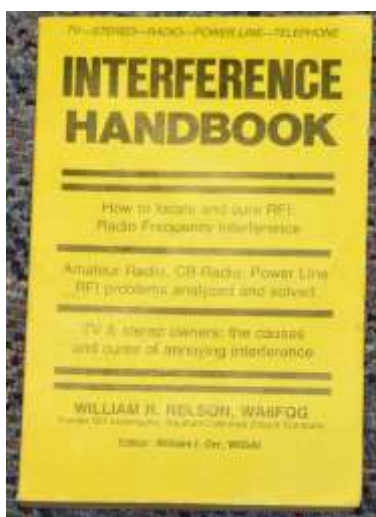


Radio shack DX-390

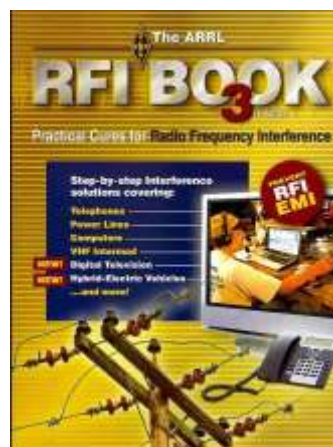
Can be used to find noise sources.



Corcom F3991 EMI Filter. Good for three amps



Interference Handbook by William Orr, W6SAI



ARRL's RFI Book

January presentation continued

Dave also stated that our current TVs will be obsolete some time in the future. Here is some information about that.

FCC Approves Next-Gen ATSC 3.0 TV Standard. New TVs will be necessary, and broadcasters will need to transmit both ATSC 2.0 (the current standard) for 3 to 5 years before turning off the older system. For now, the conversion is voluntary.

<http://www.broadcastingcable.com/news/washington/fcc-launches-next-gen-broadcast-tv-standard/170165>

Become an Amateur Radio Operator



The Raleigh Amateur Radio Society is offering Technician Level

Amateur Radio Licensing Classes

at the

Wake Tech Beltline Education Center located at 3200 Bush St, Raleigh, NC 27609 in room 341C.

The course will consist of 20 hours of classroom instruction, 3 hours of hands on learning and participation in a new ham forum at RARSfest (the ARRL NC State Convention) and is designed to teach all of the information that is needed to earn the Technician Level Amateur Radio License and begin enjoying the hobby of ham radio.

Class Schedule:

Saturday, March 3 8:00 AM - 1:00 PM (Classroom: 3100 Bush Street Room 341C)
Saturday, March 10 8:00 AM - 1:00 PM (Classroom: 3100 Bush Street Room 341C)
Saturday, March 17 9:00 AM - Noon (Hands on Demonstration Day at St. Christopher's Episcopal Church 1101 Vandora Springs Rd, Garner, NC 27529)
Saturday, March 24 8:00 AM - 1:00 PM (3100 Bush Street Room 341C)
Saturday, March 31 8:00 AM - 3:00 PM (RARS FEST - NEW HAM FORUM & Testing Option at Graham Building NC State Fairgrounds 1025 Blue Ridge Rd Raleigh NC. Tickets are \$10 for ages 16+. 16 and under free)
Saturday, April 7 8:00 AM - 4:00 PM (Classroom: 3100 Bush Street Room 341C with Test administered 1:30 - 4:00)

Continued from the previous page

Capacity is limited to 20 students and registration is required. Due to limited seating no walk-ins will be accepted. Students under age 12 must be accompanied by an adult.

Students must come with the textbook ARRL Ham Radio License Manual 3rd Edition

ISBN: 978-1-62595-013-0 which can be purchased at this link:

<http://www.arrl.org/ham-radio-license-manual>

The non-refundable cost for the course is \$10 payable in cash at the first session. For students over age 18 there is an additional fee of \$14 for the license test payable on the day of the exam.

The instructor is Mr. Curt Phillips whose amateur call sign is W4CP. Curt has been licensed for more than 40 years, holds an Amateur Extra class license, and has many years of experience teaching amateur radio classes. He has taught technical courses at several area community colleges and for the NC State University Industrial Extension Service, NC A&T's Center for Energy Research and Technology as well as UNC-Charlotte and Virginia Tech.

To ask questions or register for the class please e-mail RARS Education Director Carl Davis at w8wz@aol.com

Future RARS Meeting Topics

Titles, topics, and speakers subject to change.

| | | |
|-----------|--|--------------------------------------|
| 2/13/2018 | Emergency Communications and Amateur Radio | Karl Bowman, W4CHX |
| 3/13/2018 | Awards, RARS Birthday Party (2/12/69) & RARSfest Update | RARSfest chair Tara Goodwin W4TSW |

Be A Part of Something Great.....

RARSFEST

To most of people in the Carolinas, and surrounding states, the coming of spring means Easter eggs, green grass, windy days, and warm sunshine. But to those in the world of amateur radio it means one of the most looked forward events of the year, RARSfest.



To those few who are looking at this and asking “What is RARSfest?” RARSFest is the Raleigh Amateur Radio Society’s local Hamfest and ARRL NC State Convention located in the Jim Graham Building at the NC State Fairgrounds on Saturday March 31st from 9am-3pm. RARSfest will have many dealers and vendors, along with a 230 table flea market, door prizes, license exams, project tables, meetings, forums, QSL card checking, satellite demos, and even a fox hunt. Free parking is available on fairground property and there is even a restaurant in the building to grab a bite between shopping and building. Want to know more? Need tickets? Then check out our website at www.rarsfest.org

But I think for the most part anyone who has been in the hobby for at least a year, and lives in the area, knows what RARSfest is. Most have probably walked those aisle looking for the perfect deal, sat in on the Basic Spotter Training or New Ham panel, and maybe even tested in our morning VE testing session and became a new or upgraded licensee prior to enjoying the show. But what you might not know is the work, dedication, and manpower that goes into making this the greatest show of the year.

While in the building and enjoying all that is offered it must seem like a well-oiled machine. The stage is announcing door prizes, the GOTA station is making contacts, the dealers and vendors are interacting with those around them. But a great shows takes great people to make it happen. To start there is a committee that starts meeting the

year before and spends hours discussing, and then re-discussing, what needs to be changed, added, or left the same from previous years. Then there are flyers to be created and printed, mail outs to distributed, signs to be printed, and so much more. But even then this is not what makes RARSfest so great, because no matter how much planning a group in a room does it still needs people to make it happen. People like **YOU!!!!**

That's right, it's the volunteers at RARSfest that make this show run the way it does. On the first of January the website opened up for Volunteers with 219 spots for volunteering. Yes, I know, that is a LOT of people, and at the end of January only 32 of those spots have been filled. Which means we need more great people to sign up to assist, and don't worry, the shifts are not long nor even hard.

Want a spot for a few hours where all you do is sit and smile? Sounds like you would be perfect for the admissions table selling tickets and checking wristbands.

Want to see what the club members have for sale before the public? Check out volunteering at the RARS consignment table.

Like to be on the move and see everything and watch people? Then security is perfect and no need to be able to take down a bad guy. We just want people to see you watching.

Are you outgoing, like to track items, and help guest? Sounds like you should join us at the Stage.

Like to see what's to eat and help get everyone fed? Let's look at Friday's dinner set up and break down.

More low-key and like to teach people to build? We have a table for that! The project table!!!

Want to be able to get a glimpse of everything before the doors open? We do still need a set up team.

Not an early riser and prefer to 'dumpster dive' at the end to see what's being left and thrown out? Then sign up for tear down.

Continued from the previous page

Don't really want to be seen but, as most hams, like to be heard? Well then let's talk about a shift on Talk-In, we will even provide the radio at the fest if you want to be there!

So you see there is so much that goes into RARSfest and the most important part is all of our volunteers who selflessly take part year after year spending a few hours here and there helping the show run smoothly. And every year, as our show gets bigger, our need for volunteers increase. So become a part of something great and volunteer your time at RARSfest, you already know you're going to be there anyways.

73, Tara Goodwin, W4TSW

Roanoke Division ARRL Service Award

The Roanoke Division ARRL Service Award was instituted in 1968 by then Roanoke Division Director Vic Clark, W4KFC. Vic intended the award to be recognition for a long history of significant and consistent contributions to Amateur Radio. The amateur selected would have, over the years, dedicated much of his or her time to Amateur Radio and the ARRL. Nominations for the award were solicited in late 2017. The selection committee is comprised of past award recipients, and the administration of the award is done by the Roanoke Division Director.

Out of a field of very worthy candidates, one clearly received the majority of the votes.

Congratulations to our 2017 Roanoke Division ARRL Service Award winner:

Karl Bowman W4CHX of Raleigh, North Carolina

The award presentation is currently planned at the 2018 RARSFEST, the 2018 ARRL North Carolina State Convention, on Saturday, March 31, 2018 during the ARRL forum: <http://www.rars.org/rarsfest/>

Please join us in congratulating our 2017 Roanoke Division ARRL Service Award winner!

'73 de JIM N2ZZ

Director – Roanoke Division

Representing ARRL members in the Virginia, West Virginia, South Carolina and North Carolina sections

ARRL – The National Association for Amateur Radio™

Spotlight on RARS Net Controls

Virginia Enzor NC4VA, RARS Net Manager



As indicated last month, I thought it would be fun to get to know more about our RARS Net Controls! NCOs were given a questionnaire, and this month I am sharing the answers given by our Monday night NCOs. Monday is always “Bob Night” since both NCOs are Bobs!

Spotlight on RARS Net Control Bob Brown

1. Name, Callsign & License class
Bob Brown N4GEB, Extra

2. Assigned RARS Net night
Every other Monday night

3. Year originally licensed ,
1971

4. How did you get into ham radio?
Listening to AM radio at night hearing distant stations like WABC from New York, I was living at the time in Central FL. Also a friend from church was very supportive and helped me.



Bob Brown N4GEB at his station

5. What aspects of the hobby currently interest you?
Lots...HF rag chewing and DX, digital modes like RTTY, PSK31 and recently FT8. Also like the 2 meter local activity on RARS.

6. Positions that you hold in RARS or other organizations
Elder in my church, past treasurer in my ham radio club in FL.

7. Any special awards? (DXCC, WAS, WAC, IOTA, etc)
WAS, probably DXCC but have not pulled all the records to submit, also got a QSL card from the space station.

8. Any special project you are currently working on?
Not currently, but I really enjoy fixing old ham radio equipment, and test equipment.

9. Interests outside of radio?

Continued from the previous page

How much time do you have J Target shooting, photography, Radio Controlled airplanes and Quads, and now that I have retired I enjoy working for our church, I like doing sound, playing guitar for the music team, and helping lead the Sunday morning worship. I joke about this that the pay is terrible (like Zero) but the benefits are out of this world!

10. Words of advice for new hams?

Find a good Elmer to help you and join a good club like RARS. Then start slow and find some aspect you really enjoy and do that well, then branch out into new areas so the hobby does not become stale.

Spotlight on RARS Net Control Bob Woodson

1. Name, Callsign & License class
Bob Woodson WX4MMM, Extra
2. Assigned RARS Net night
Every other Monday
3. Year originally licensed, 1996
4. How did you get into ham radio?
Wanted to participate in the Skywarn Program
5. What aspects of the hobby currently interest you?
(blank)
6. Positions that you hold in RARS or other organizations
AEC Central Carolina Skywarn, NCO PCTN
7. Any special awards? (DXCC, WAS, WAC, IOTA, etc)
SKYWARN Service Awards from the Raleigh National Weather Service
8. Any special project you are currently working on?
Work and family
9. Interests outside of radio?
Meteorology , CoCoRAHS, Atlantic Coast Observer Network (ACON)
10. Words of advice for new hams?
Encourage participation in public service events. Take a basic skywarn training class.
Check in to the local VHF/UHF nets to gain experience



Bob Woodson WX4MMM at the
National Weather Service

The Carolina Weekend

by Marty Young, NCQP Chairman

North Carolina QSO Party February 25, 2018 10am – 8pm EST

South Carolina QSO Party February 24, 2018 10am – 9pm EST

North and South Carolina will be in the limelight this month for a premier operating event, “The Carolina Weekend”. This combination of North and South Carolina joining forces for one big hoedown is not to miss! Let’s get those wire antennas in the air and HF rigs dusted off and warmed up. There's a party, on-the-air!

Both NC and SC QSO parties are an on-air operating events primarily on the HF bands. The objective is to have as many North and South Carolina stations on the air to make contact with everyone else in the world on phone, CW, and digital modes. They will be seeking to hear and work us. During the specified operating times, stations exchange location information and (optionally) a signal report. Everyone keeps score and submits their log vying for neat awards and fabulous prizes! All the information you need to know is located on the website at www.ncqsoparty.org and www.scqso.com it’s a laid back “contest” with many interesting aspects to work some neat stations and bonuses.

Speaking of fun opportunities, the NC bonus counties this year are Alleghany (ALL) and Columbus (COL). New to the SCQP is the bonus county of Chesterfield on Saturday. Look for a special treat, NC4QP (Hallmark NCQP bonus station manned by Paul, AA4XX) in a location that will only be revealed on the air. Let’s just say the rules changes concerning multiple county line sitting were very much in play for this bonus station. W4DW will be manned by yours truly, W4MY, and Andy our IT guy, AA9P in Harnett., and Dwayne, N4MIO will be on digital from Alamance. Rounding out the bonus stations will be the USS North Carolina battleship museum, NI4BK, and W1VOA bonus operation at the VOA Site C in Pitt. You get extra points over and above normal for working one of

these stations. Thanks to everyone putting out a big effort with these bonus stations, they truly add a great deal to our event.

But wait, there's more! In addition to all the regular excitement a spelling bee has been added. No surprise the word everyone must spell is CAROLINA. You spell it by working a station in a county where the first letter of that county name is contained in CAROLINA. All 146 counties in North and South Carolina count. Once you collect all 8 letters you can apply for a special certificate and be entered into a drawing for a \$50 Wireman gift card. There are a couple of provision, though:

1. The two "A's" must be from two different counties starting with the letter "A",
2. You must participate in and submit your log to both NC and SC QSO parties electronically via the website,
3. Counties can be all from one state or a mixture of both but you must submit logs to both, and
4. You fill out the on-line form at the time of your electronic log submission on either NC or SC website.

If you are new to this QSO Party stuff, there's a way to get your feet wet before jumping in to the deep end. The RARS club operation invites newbies and experienced Elmers alike to join Joe and Liz White hosting station N4RAL from Chatham County. Contact Joanne Mars, AA3N, our clubs manager on the NCQP committee, for more information. There's nothing like a good social gathering in a relaxed atmosphere to learn the ropes of HF operating in a state QSO party than to join others in the same boat! I hear that a good time is always had by all!

So visit the NCQP website, www.ncqsoparty.org and the SCQP site, www.scqso.com to learn all about it. As sure as you're reading this, there will be all kinds of folks wanting to talk to you during the Carolina Weekend. So get on the HF bands and have fun!

Overcome Mic Fright with Good Net Skills

Many new hams (and old hams too!) lament that they suffer from the malady known as “mic fright”. They are happy to listen all day long, but as soon as they reach for the microphone to make a transmission, their palms sweat, their heart rate increases and they find their mouth so dry they can’t talk.

They are not sure when they should transmit, who they should call, what they should say or when they should key and unkey their microphone. So, they don’t transmit.

A great cure for this is to participate in a net. RARS has nets on our 146.64 repeater every evening at 8 PM. Nets are a great way to cure mic fright because you always know who you are talking to, when you should transmit, when you should receive, and what you should say. Nets also provide a great way to get to know your fellow RARS members and learn more about the performance of both our repeater and your own station.

Here are some helpful hints to enjoy nets. These hints are specifically for RARS VHF FM nets but they generally apply to voice nets on HF as well.

#1. Listen to Net Control. This is the most important thing. As you might guess from the title, the net control station is in control of the net. Net Control will tell you everything you need to know and do. Net control will tell you when he or she wants you to check in and how you should do it. Your call sign has a prefix and a suffix. The prefix is the part of your call before the number and the suffix is the part of your call after the number. Checkins are usually called for in alphabetical order based on your suffix. Calling for checkins in this way spreads out the checkins. This reduces the likelihood of doubling and increasing efficiency. It makes it easier for everyone to communicate by bringing order to the process. It ensures that even weak signals can be heard and all hams can participate. My callsign is W8WZ. That means my suffix is WZ so I always check in with the group of the alphabet being called for that includes W. Sometimes net control asks for checkins from stations who are mobile or portable first. If you are in that category, check in then and net control will give you priority because your signal quality may fluctuate as you move around.

#2. Listen to others. When net control calls for checkins from your group listen to make sure that no one else is calling at that moment. If the frequency is clear, key your transmitter and give net control’s callsign or just say “net control”. Then unkey the mic and listen. This is very important. If you hear anyone else talking, do not transmit. Instead, wait until that person is done checking in then try again. When you finally unkey your mic after saying net control’s callsign and you do not hear any other station, then key your mic again and slowly give your callsign followed by your name and location, then unkey the mic and let others check in. After all of the checkins are finished net control will then list all of the callsigns that checked in. You should hear your callsign listed. If not, try again the next time net control

asks for checkins.

#3. Listen some more. Net control will make any announcements, and direct the net. When it is your turn for a rag chew, net control will call you and unkey her or his mic. At that point it is your turn to transmit. As always, let the repeater drop before you transmit. This will prevent you from timing out the repeater during your transmission. Remember in a net, you are always talking to Net control. You know everyone else is listening, but your transmission is directed to net control. Therefore, you call net control's callsign, say "this is" give your callsign and then share your rag chew. If you like to talk for a long time, remember to unkey your mic regularly to prevent timing out the repeater and earning what we used to call "the purple crystal award" back in the days when our VHF rigs were crystal controlled. When you are done give your callsign and say back to net control, then unkey your mic and enjoy listening to the rest of the net.

If, during the net, you ever want to talk to someone other than net control then you must first call net control and get permission to "go direct" with the station you wish to speak with. If net control grants that permission the two of you can communicate directly. When you are done you both give your callsigns and say "back to net control".

#4. Listen on the input. A fun thing to do is to listen on the repeater's input frequency while others are sharing their rag chews. This will allow you to learn who you can hear direct and who you can only work through the repeater. This is good information for you to have about your own station. If a repeater is not available it is good to know who you can communicate with on simplex. Also if a station is not making it into the repeater, try listening to him/her on the input frequency. Maybe you can hear his or her signal direct even though he/she can't make the repeater. Then you can relay that information to net control through the repeater and allow the other station to participate in the net that way.

#5. Have fun! If you make a mistake, don't worry. Do your best to follow these practices and soon they will become second nature. These established net procedures vary a bit from net to net so always listen to Net Control and follow the given instructions. These methods allow many stations to communicate effectively on the same frequency and allow everyone to be heard in the most welcoming and efficient way.

The RARS webpage has a great article about how to use the repeater at

<http://www.rars.org/repeater/rptrguide.php>

73, Carl W8WZ

Minutes

Raleigh Amateur Radio Society

RARS Members Meeting
January 9, 2018

In Attendance

The monthly membership meeting of the Raleigh Amateur Radio Society met at the Ridge Road Baptist Church in Raleigh. The meeting was called to order by President Carl, W8WZ, at 7:30 pm.

The pledge of Allegiance was recited

There were 49 Members and 4 Visitors present, which constituted a quorum.

Visitors were Doug Ferris (K4ROK), Dave Wood (W4EJ), Nathan Barnes (KM4DVE), and John O' Conner

Carl asked Dennis (NC4DR), past president, to come up to the front to be presented with a coffee mug bearing his call sign and past president title; which he accepted.

Approval of Minutes

A quorum being present, a motion to accept the minutes of the December 12, 2017 meeting, as published in the Exciter, was made, seconded, and approved.

Continuing Announcements

The RARS dinner takes place monthly on the first Tuesday (next: February 6th) at 6:30p.m. at the Golden Corral; 6129 Glenwood Ave, Raleigh.

The first RARS board meeting of 2018, and the first with the new board, will be Tuesday January 20th at 7pm and all members of RARS are welcome to come. Afterwards many members retire to the Applebees at 3625 Hillsborough St, Raleigh

The after-meeting gathering, for any who are interested, is at the Applebees at Hillsborough St, Raleigh

A new ham/Elmer's meeting with new hams, and anyone interested, takes place before each membership

Minutes continued from the previous page

meeting at 6pm at the Ridge Road church.

The president encourages members to monitor the 640 repeater to answer calls of CQ of operators passing through the area and making it our flagship repeater.

Vice President Report-Tom N4TL

Tom announced that the presentation next month will be Emergency Communications and Ham Radio by Karl Bowman (W4CHX), and he thanks everyone who submitted information and articles for the January 2018 Exciter.

Tom also had the new 2018 ARRL calendar with him where Tucker McGuire (W4FS) is featured in March making contact on the Fuji-OSCAR-29 satellite.

Treasurer's Report-Greg KE4PAX

Greg was not present but submitted a treasure's report to be read by Carl (W8WZ). There are currently 365 members this month. Anyone desiring additional treasury information may contact Greg for details.

Secretary's Report-Tara W4TSW

No report at this time

Board and Committee Reports

Education Director-Carl W8WZ: There will be a technician license class starting in March, but they are waiting for Wake Tech to verify the hours. They want the class to start on Saturday March 3rd and end at the RARSfest weekend with testing at the VE session. Keep an eye on the exciter for more information.

New Ham/Elmer Meeting-Tad KA2DEW: The new ham meeting, prior to the members meeting, built and tuned from scratch antennas. They used them to hit the Hillsborough repeater from inside the building. Tad also welcomed all members and visitors to visit the new ham/elmer meeting to learn or assist. This is Tuesdays, prior to the members meeting, at 6pm.

NC QSO Party Chair-Marty W4MY: Marty reminded everyone that the NC QSO party is coming up Sunday February 25th. He directed anyone interested in participating in, or learning more about, the event to check out the new website: ncqsoparty.org. On that day there will be a club activation during the event at Joe and Liz's resident. If you have any questions, or concerns, you can reach out to Marty (W4MY)

Minutes continued from the previous page

ARRL NC Section Manager-Karl W4CHX: Came to front of the room to discuss the serious subject of the current ARRL member concerns. He wants the amateur radio community to have faith in the organization and the elected leaders. Karl (W4CHX) understands there are some "hot issues" but he also believes there are miscommunications regarding some of the situations. Karl also commented about spectrum defense, specifically, the concern about potential future sale of spectrum to commercial interests. He has asked all amateur radio operators to think about what they can do to protect the amateur radio spectrum.

For questions or concerns, please reach out to Karl (W4CHX) via email at w4chx@arrl.org

RARSFEST Chair-Tara W4TSW: Tara announced that final flyers and ticket proofs are on their way to the printer so we will be seeing those in the mail very soon. Pre-registration for tickets is now available on the RARSfest website and, once they are printed, will be on sale at the meetings.

All lead positions are filled but they are now in desperate need for volunteers in all areas, stage, consignment, security, admissions, and Friday setup/dinner. The site is ready for any and all volunteers to utilize effective immediately.

They are looking for 1-2 Talk-In operators. This operator must be familiar with the fair grounds and surrounding roads/highways and be able to handle directing net traffic in a formal manner. They can either set up at the fairgrounds, or work from home, but they must be able to be on the air Friday from noon-8pm and Saturday from 6am-until mid-afternoon. If they can find two people they would split the shifts through the two day period.

If you are interested, or know anyone who might be, please contact Tara Goodwin (W4TSW)

Door Prizes

Door prizes were won by Tom (N4TL), Mark (KM4JRH), Tara (W4TSW)

Old Business

No Old Business

New Business

No New Business

Additional Business/Comments/Announcements

Prior to the start of the program Alan Pitegoff (AB4OZ) did a quick little Tech Tip Talk about Ferrites for filtering lines.

The program was presented by Dave Wood (W4EJ) regarding RFI Tracking & Location

Minutes continued from the previous page

Next Meeting

02/13/2017, 2011 Ridge Road at 7pm

Meeting was adjourned at 9:11pm

Meeting Minutes taken and Submitted by Tara Goodwin W4TSW

2001 CESSNA 560



Ernie, NC4EW sent me this picture

2001 CESSNA 560, Fixed wing multi engine, 11 seats , 2 engines

73, Tom N47L

Current Public Service Opportunities

To volunteer for a Public Service event please complete the form at the top of this page.

WELCOME TO THE 2018 HAM PUBLIC SERVICE EVENT SIGNUP PAGE. Choose the event(s) for which you would like to volunteer and complete the sign-up form at the top of the page... note... one form for EACH event that you are volunteering. It's also very helpful to indicate what type of assignment you're interested in.

THE 2018 LIST OF PUBLIC SERVICE EVENTS WILL BE POSTED AS CONFIRMED - CHECK BACK FREQUENTLY FOR UPDATED INFORMATION

Events you can sign up for now:

2018 Eastern Region Odyssey of the Mind Tournament

March 3, 2018 - Saturday - Raleigh, NC

This is an all-day event, starting at 7 AM and ending shortly after the last team competes in the late afternoon. ~18 hams are needed to staff this tournament.

* Location: Wake Technical College Campus, 9101 Fayetteville Rd, Raleigh, NC 27603

* Ham Coordinator: Brian Young (KA9QJT)

* Website: [Odyssey of the Mind](#)

* **TO VOLUNTEER, FILL OUT THE FORM AT THE RARS WEBSITE, INCLUDING YOUR T-SHIRT SIZE** www.rars.org/public-service.php

2018 - 46th Annual RARSfest

March 31, 2018 - Saturday - Raleigh, NC

2018 MS Walk Raleigh

April 7, 2018 - Saturday - Raleigh, NC

This is a walking event, one or three miles around PNC Arena. Sponsored by the MS Society. Shadows and Rest Stop Hams are typically needed at 7:30 AM, with the event wrapping up around noon.

* Location: PNC Arena, 1400 Edwards Mill Rd., Raleigh, NC 27607

* Ham Coordinator: Brian Young (KA9QJT)

* Website: [MS Walk Raleigh](#)

* **TO VOLUNTEER, FILL OUT THE FORM AT** www.rars.org/public-service.php

2018 Tour de Triangle

April 28, 2018 - Saturday - Cary, NC

This bike ride event requires SAGS, as well as Hams assigned to Rest Stops. Funds raised by riders benefit UnitedHealthCare Children's Foundation which makes grants to families with children needing medical care.

* Location: Bond Brothers Beer Company, 202 E Cedar St, Cary, NC 27511

* Ham Coordinator: John Stone (K3RHJ)

* Website: [2nd Annual Tour de Triangle Ride](#)

* **TO VOLUNTEER, FILL OUT THE FORM AT** www.rars.org/public-service.php

Current Public Service Opportunities Continued

The most versatile pieces of equipment for working as a ham volunteer during public service events are as follows:

PRIMARY EQUIPMENT

- * Dual band (144/440) 25 watt (min) mobile transceiver
- * A 1/2-5/8 wave well grounded dual band mobile antenna

EXTRAS THAT ARE HELPFUL

- * Dual Band (144/440) hand held transceiver
- * Extra set of charged batteries
- * Ear phones & speaker mic or boom mic/headphone set
- * Higher gain antenna than the supplied rubber duck. For example Comet BN-24 or SMA-24 or Diamond RHF40 or SRH77CA. There are also many other hi-gain HT antennas available.

Interesting websites

Proportion of modes used on the air – 2017 update. Check the new FT8 mode on the chart.

<http://g7vjr.org/2018/01/proportion-of-modes-used-on-the-air-2017-update/>

FT8 operating guide

www.g4ifb.com/FT8_Hinson_tips_for_HF_DXers.pdf

The PL259 Connector

I came across this video and thought it was very good. Would be good to share with RARS and/or make it the subject of a meeting presentation.

<https://youtu.be/4qwgXqM-lx8>

73, Marc, W4MPS

Steve-VE7SL's blog and website. Steve is a DC to light guy and presents interesting information.

<https://ve7sl.blogspot.com>

<http://www.qsl.net/ve7sl/>

RARS Classifieds

Copied from www.rars.org/classifieds.php

Two beams for sale

Posted January 15th, 2018 by: NC4EW

Contact: nc4ew@att.net

For Sale:

Hy-Gain 4 element 20 meter Yagi Beam (BA204) complete with factory recommended matching balun. All mounting hardware and original factory manuals included.

Hy-Gain 3 element 15 meter Yagi Beam (BA153) complete with factory recommended matching balun. All mounting hardware and original factory manuals included.

Pick-up in the Greensboro, NC area.

Ernie Wall, NC4EW

336-643-6468

International Space Station, HAM radio and Moore Square Middle

On Monday, 5 February 2018 RARS member John Brier KG4AKV worked with the Moore Square Middle School in Raleigh to help their students communicate with the International Space Station via amateur radio.

Congratulations to KG4AKV and his team on a great success!

Some videos of the event:

1. <https://www.youtube.com/watch?v=VtngAHGKzpY>
2. https://www.facebook.com/SpaceComms/videos/1872435709494950/?hc_ref=ARQEHsHFqPzYN2XHUef9qSr_JUonkPOmE5OIQTlYHPiWXj0ERIO4wIpJQvbcg16t9Uc&pnref=story
3. <http://www.wral.com/weather/video/17315411/>
4. <https://www.facebook.com/WRALTV/videos/10157234304317178/>

Thanks to John KG4AKV, James KE4DRN and Carl, W8WZ for sending this information.

A Letter to the Editor with some history about RARS

Hi Tom,

My name is Bob Workman, WA4ZZN, and I am a charter member of RARS. I was the first club secretary serving in '69, '70, and '71. I saw in the latest RARS newsletter your inclusion of the program from the 1970 Hamfest. I enjoyed seeing it very much as it brought back a lot of memories of the early days of the club. I thought you might be interested in some more memorabilia of the club. The other day I ran across an August 1973 issue of the newsletter that was printed then and thought you might like to see how they looked back then and am enclosing a copy of the front page. I saved this issue as a souvenir since Ellie is my wife. Of course, back then there was no web so we had to snail mail them. As the club grew, postage became a relatively large expense as was the printing. We were fortunate then that I owned a printing business and was able to do that at cost. If you are interested, I could send you a copy of the whole newsletter. I am also enclosing a copy of the club QSL card that some of the members used for a number of years back in the '70's. As an aside, I also printed the first few SERA Repeater Journals until Wayne Williams, K4MOB, took it over.

I noticed someone suggested changes to the club logo. You might like to know that the original logo was designed by Stu Meyer (SK), W2GHK. His daughter is presently a club member and has Stu's old call. Stu was a world famous DX'er in his day and was a very active ham with a wealth of knowledge. He was employed at Aerotron, an electronics manufacturer now out of business, while in Raleigh. They produced the Gonset line of radios. Stu's daughter might be able to tell you enough about him to do an article on him. The older hams who knew of him would probably enjoy it.

I don't know if the club has a historian or not but I hope you can get these items to them or at least put them in a file somewhere with the club papers. The only present members of the club that I remember who were there when I was are Chuck Littlewood, Bill McDowell, and Charlie Swindell. There may be others but I just don't recognize the names. I am sure these guys could expand on these thoughts and maybe add some new ones. Please pass along my hellos to them.

There was another club formed in Raleigh before RARS but it disbanded some years earlier. The W4DW call has some connection to it or one of it's members, I believe, but I don't remember exactly what. This club originated from a little net that Lee Johnson, WA4ZNA, Carroll Willis, WA4VCZ, and I had on 15 meters with our new SB-101's. Bill McDowell, K4CIA, joined us a little later (he lived in our neighborhood) and then others joined in as they heard us on. We talked about having a dinner get-together so that our wives could meet and get some sympathy from each other. The group grew large enough from the party idea that the idea of a club came up and RARS was born.

Some time in the mid-seventies or so the club had the first project for the members. It was a keyer that Paul Brown and his son (I don't remember their calls) handled. It was a semi-professional (printed circuit boards and components, knobs, silk screened front and back panels) but homemade kit and those of us who bought them constructed them at home and/or at classes at the meeting site for those who had nothing at home or those with no construction experience could get help. I don't remember how much the kit cost but it was very inexpensive compared to a commercial

Continued from the previous page

one. I expect that Bill, K4CIA, could tell you more about this one. I am enclosing photos of mine. It still works and I use it those very, very few times I get on CW.

I am also now a charter member of the Carteret County Amateur Radio Society in Morehead City. We meet on the 4th Saturday morning of the month at 8:30 a.m. at the Golden Corral restaurant. Please stop in and visit when you are in Morehead City.

I enjoy reading the newsletter and look forward to receiving it each month. You do an excellent job on the interesting layout and use of color. Keep up the good work and the best of good fortune getting enough news to print each month – we used to have problems getting articles from the members to have enough to print. Eventually we had to join the Amateur Radio News Service to get enough. (I don't know if they still exist.) I never cease to be amazed at how many members the club has and all the myriad events and activities that the club is involved in. I'm sure none of us original members had any idea the club would grow and be as successful as it has. Please pass on my congratulations to all for making RARS so great.

Bob Workman

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EDITOR



AFFILIATE

TOM ALEXANDER, WA4OTA
ASSISTANT EDITOR

"Raleigh Amateur Radio Society News"

AUGUST 1973

ISSUE 46

MEET YOUR MEMBERS... ELLIE WORKMAN, WN4EXZ



The advent of Women's Lib was received rather quietly in amateur circles since many women have actively participated in the hobby for years. In fact in the club several gals have been quite active in helping with club activities and Ellie is one of these. She is presently club Social Activities chairman and in the past has worked hard behind the scenes to make the women's programs at our hamfests and conventions so successful. Further, she has helped coordinate several club socials at "Charlie Brown's".

Ellie was born in Arkansas and moved to San Diego, California with her family when she was very young. She met husband Bob, WA4ZZN, there when he was serving in the Navy. She just celebrated her birthday on July 9th. Bob said, when asked her age, that she is now "25 and holding".

Recently she was licensed as WN4EXZ but her ham activities have been very limited due to her family duties, and possibly Bob's zealous efforts to protect the final in his SB-101. Bob reports a current effort under foot to get her on the air at their vacation spot at Atlantic Beach.

Presently Ellie, Bob, and family reside at 3625 Brentwood Road, Raleigh. As soon as Bob gets the Beam and telephone pole up at the QTH, Ellie will be able to lay a few "key clicks" on Ed and Lee and the other two meter crew in the neighborhood who have turned Brentwood into a mass of end-to-end yagi's, Ringo's, etc.

Good luck, Ellie, and we hope to see your license upgraded to advanced class in the very near future.

NEXT MEETING

The next monthly meeting of the Raleigh Amateur Radio Society will be held Wednesday, August 1, at 7:30 PM.

The meeting will be held at the Civil Defense Headquarters in the basement of the NC State Government Administration Building, 116 West Jones Street. Enter through the back door. Everyone interested in amateur radio is invited to attend. And bring five friends!

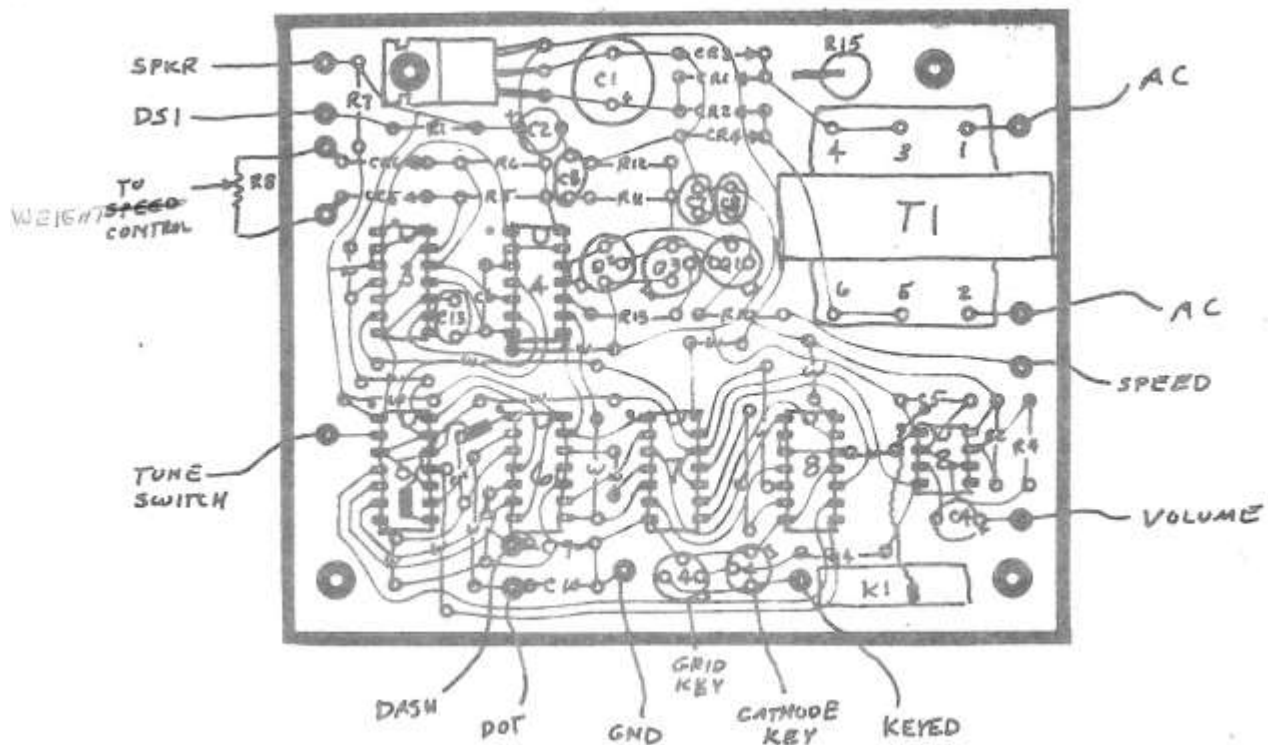
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Continued from the previous page, RARS Keyer project



SIZE : 5 1/2" wide x 3" high x 7 1/2" deep

Continued from the previous page, RARS Keyer project



C1—1000 μ F @ 16V
 C2—68 μ F @ 15V
 C3—.1 μ F @ 10V
 C4—68 μ F @ 15V
 C5—.033
 C6—.015
 C7—.47
 C8—.47
 C9—.002
 C10—.002
 C11—.002
 C12—.002
 C13—.1 μ F @ 10V

F1—V8 A
 G1—ON OFF
 S2—TUNE
 T1—

R1—470
 R2—6.2K
 R3—1K POT
 R4—47K
 R5—1K
 R6—1K
 R7—2K
 R8—50K POT (VOLUME)
 R9—100K POT (SPEED)
 R10—27K
 R11—820
 R12—1K
 R13—4.7K
 R14—820
 R15—22 1W

J1—KEY JACK
 J2—KEYED JACK
 DSI—LED
 DS2—SPKR 8 Ω

U1—7805
 U2—NE-555
 U3—7473
 U4—7402
 U5—7410
 U6—7473
 U7—7400
 U8—7474

Q1—2N2907
 Q2—2N2222
 Q3—2N2222
 Q4—

CR1—6 IN4454

K1—OPTIONAL RELAY